EXHIBIT E

In the Matter of:

Kahraman

vs

The State of Arizona

Video Recorded Deposition of Ryan Stewart, M.D.

February 26, 2024

GRIFFIN GROUP INTERNATIONAL

3200 East Camelback Road, Suite 177
Phoenix, Arizona 85018

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to thrive.
THE REPORTER: It would get what?
A. Failure to thrive diagnosis.
Q. BY MR. CROWN: Malnutrition can cause failure to thrive?
A. Correct.
Q. And malnutrition can cause acute right heart failure?
A. Correct.
Q. Anasarca, explain what that is.
A. Anasarca is just generalized edema, so swelling of hands, feet and the face. It's called anasarca.
Q. And when you say "generalized," meaning it's bodywide, there's a swelling that is, you know, throughout the body; correct?
A. It's in multiple places, yes.
Q. What does that indicate?
A. So there are different reasons why patients can have generalized edema. The two most common would be heart failure or kidney failure, but you could also get it from diffuse inflammation or infections.
Q. And malnutrition can contribute to and cause heart failure; correct?
A. Correct.
Q. So therefore, malnutrition can cause anasarca?

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A. Correct.
Q. Right ventricular dysfunction.
A. Yes.
Q. This is tied to the acute right heart failure?
A. Yes.
Q. Ketotic hypoglycemia, can you explain what that is for the record?
A. Yes. So when a patient goes into a starvation state, they start to make ketones, kind of like a diabetic, like, in DKA. So if you're not getting enough nutrition, your body starts making ketones and breaking down fats and muscles to find an alternate food source, so you make ketones. And then the hypoglycemia meant that his glucose at the time at presentation was below normal.
Q. If Kenan did not have this medical intervention, was he starving to death?
MR. CONNELLY: Form and foundation.
A. Yes, that -- that was a concern, yeah. More general would be without medical intervention, he would have had potential threat to life and limb.
Q. BY MR. CROWN: And is that a fair description based on what we've been discussing, that without medical intervention, the malnutrition is such that he was starving to death?

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MR. CONNELLY: Form and foundation.
A. Well, by the evidence of the fact that the patient needed to be admitted to the ICU and receive all these interventions in order to stabilize them would suggest that this was life -- potentially life-threatening if not intervened.
Q. BY MR. CROWN: Lower extremity weakness, can you explain that a little bit more?
A. Yeah, Mom reported patient was having trouble walking, balance issues, weakness, yeah.
Q. In fact, wasn't it reported that he stopped walking two months before this hospital admission?
A. Yes, that's what Mom reported.
Q. And there was certainly no neurologic or orthopedic explanation for that; correct?
A. Not at the time when he came out of the ICU. It was being investigated still.
Q. Pleural effusion, can you explain what that is?
A. That also would -- it's a similar thought process around the anasarca or generalized edema where you get fluid distributed outside of the blood vessels, you can get fluid that distributes into the bases of the lungs, so it's fluid that's outside of the lungs, but still in the chest cavity.
Q. Sure.

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In that -- in that pleural space area; correct?
A. Yes, yes.
Q. That compromises breathing?
A. It can, yes.
Q. Pulmonary hypertension, what is that?
A. That's when you have increased pressure in the blood vessels in the lungs that the heart now has to try to fight against.
Q. Retarded development following protein-calorie. Can you explain that?
A. Yeah. So the last word is "malnutrition," so, "Retarded development following protein-calorie malnutrition." So his height and his weight were less than what would be expected for his age and was being attributed to protein-calorie malnutrition or just malnutrition.
Q. Then the last says, "Unspecified severe protein-calorie malnutrition."
Can you explain that?
A. So it's offering a diagnosis for the malnutrition, so he has malnutrition, but it's not -- the unspecified says it's not giving a specific reason why, so unspecified reason.
Q. The reason eventually developed into the

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Q. There's no question pending, Doctor.
Now, on page 1085 is a discussion about the diet that the kids were on down at the bottom there where it talks about Dad reports that Kenan -- I'm sorry. That's not what I was looking for.
Right below that, regarding nutrition, Dad reports about the New Zealand lamb and all that; right? Do you see that?
A. Uh-huh.
MR. CROWN: What page are you on?
MR. CONNELLY: 1085.
Q. BY MR. CONNELLY: Is it your understanding or do you know whether the parents were on the same diet, eating the same foods that the children were eating?
A. I'm not sure actually.
Q. Did you ever ask Mother or Father that?
A. I did not.
Q. Okay.
A. Not to my recollection.
Q. Did either Mother or Father look malnutrition -- malnourished to you?
A. Not to my memory.
Q. And you were able to -- you saw and spoke to Mother a number of times; right?
A. Yes.

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Q. And did you see and speak with Father as well?
A. Yes.
Q. Okay. And on this page right above the Other on the Development, it says, "The child's development was unremarkable. Dad reports that Kenan achieved normal developmental milestones at age-appropriate intervals." Do you see that?
A. Yes.
Q. And do you have any reason to dispute that?
A. No.
Q. In fact, you never obtained the records from the children's primary-care physician to determine whether or not the children had been meeting their developmental milestones at age-appropriate intervals; right?
A. Not to my recollection, no.
Q. Okay. And that would be something that would be kind of important to your diagnosis of failure to thrive, wouldn't it?
MR. CROWN: Objection to form and foundation.
A. It depends on -- like, failure to thrive can start at any time. So if you're talking about developmental milestones, if he, you know, had normal development through the first four years of life and met

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all of his milestones and then the malnutrition, failure to thrive started at some point later than that, and at that point, he completed the majority of his primary neurological development, and then mainly at this point, let's say in the last year before he came in, is more of an issue of height and weight, then he could still meet the -- he could -- both things could be true where he met his milestones, but then now he's showing signs of malnutrition and failure to thrive.
Q. BY MR. CONNELLY: Okay. And do you agree with me that if the parents had the child on this GAPS diet or a special diet and the children are meeting their milestones, that there wouldn't be any reason for the parents to suspect that there was anything deficient in the diet; right?
MR. CROWN: Objection to form and foundation.
A. So as long as the diet was the same since -- I mean, you'd have to look at when -- I mean -- you're asking me to put myself in the position of the parents. Just, like -- so if I saw them in clinic and they had made no changes to the diet, let's say, over a longer period of time and then the changes started to happen later and there didn't seem like there was a time condition, then, yeah, you wouldn't necessarily

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attribute it to the diet.
If the diet was becoming increasingly restrictive and coincided with changes in height and weight, then you would be suspicious. And it's -- again, it's a long time ago, so it's hard to -- hard to remember exactly what the time course was that Mom put forth when speaking to her.
Q. BY MR. CONNELLY: And if the presence of the mold infestation in the house was discovered after this hospitalization, would it be reasonable for the children to be tested and to consider whether the mold had been an issue in Kenan's presenting problems in December of 2018?
MR. CROWN: Objection --
MS. DEAN: Form and foundation.
MR. CROWN: -- form and foundation.
A. That would be a better special -- question for, like, a mycologist or someone who specializes in those types of investigations, so I don't know specifically which test that they would run or investigate.
The line of thinking is -- at the time was, yeah -- so if Kenan in that situation wasn't improving, then -- or -- you know, then -- with typical interventions or the most -- like, when we start your working diagnosis, you're starting to treat, and they

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fail to respond, then you start looking for the really rare, weird things.

Q. BY MR. CONNELLY: All right. Now, but if the child is outside of the home --

A. Uh-huh.

Q. After he leaves this hospital here in January of 2019, he doesn't go back home; right?

A. Uh-huh.

Q. He goes into foster care?

A. Uh-huh.

Q. You understand that; right?

A. Yes, yes.

Q. And then it's discovered that there's mold in the home.

A. Uh-huh.

Q. Do you think that it would be a good idea -- DCS has custody of the children now; right?

A. Uh-huh, uh-huh.

Q. Do you understand that?

A. Yes.

Q. Okay. Would it be a good idea for DCS to then come back either to PCH or to Banner or to some mycologist to say, "Please test these children for mold to see if they have toxins in their body and to tell us whether or not the level of toxins might have caused

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some of these issues with Kenan"?

MS. DEAN: Form and foundation.

MR. CROWN: Objection to form and foundation.

A. So -- so in medicine, we're trained to think along the lines of probability. So, like, is it possible, yeah. You're talking about a one in a million situation. Like, it's rare enough that, like, medical schools and residencies, mold in houses isn't really something that's stressed because it's so rare. Is it possible, yes. Is it likely, no, it's not likely. But again, better question, I mean, calling a mycologist and asking them, I mean, sure, that's --

Q. BY MR. CONNELLY: It makes sense?

A. -- not a bad idea. Is that typical or standard -- that would be more or less above and beyond the typical, but, yeah, I don't have a problem with it.

Q. If you're still looking for answers to issues you haven't resolved, you should look at all possibilities, shouldn't you?

A. Yeah, I think that's -- that's a reasonable statement.

Q. There's been some discussion today about -- or Mr. Crown had you looking at a bunch of statements about Mom's conduct in relation to the nutrition being given

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at the hospital. He had you look at page 146 (sic), but he didn't have you look at the statement in the nutritional communications. Let me know when you're there, page 1146. I'm sorry. I said 146, but I meant 1146.

A. Yep, I'm there.

Q. We've seen today that a lot of the notations that were made about caloric intake and all were made by Mother, right --

A. Uh-huh.

Q. -- while he was in the hospital?

Is that a "yes"?

A. Yes.

Q. And here in this paragraph at the very top, there's a bunch leading up to this statement there. The second to last sentence, Mom had made estimates of 1,118 calories, 56 grams of protein, 92 grams of fat in the lamb meatballs and other things that he had been fed. And then it says, "To verify data using USDA database nutrition for -- excuse me, let me restart.

"To verify data using USDA database for nutrition analysis, Mom's estimates appear to be accurate." Did I read that correctly?

A. Yes, uh-huh.

Q. Okay. So do you know why -- you see a bunch of

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language that's stricken out below that section there?

A. Yes.

Q. Do you know why that's all stricken out?

A. Usually means the author is saying it was entered in error.

Q. Okay. And -- but on December 22nd of 2018, Tracey Chacon -- is she the nutritionist or he?

A. I can't remember who Tracey was.

MS. DEAN: If you know.

A. Looks like a nutritionist. I don't know.

Q. BY MR. CONNELLY: Okay. But in any event, the estimates that Mother had been making for the calories, at least here, were accurate; right?

A. Yes.

Q. She wasn't making it up?

A. Per Tracey's report, yes.

Q. Okay. All right. Now, you said a couple of times that as far as a discharge plan goes, that you wanted to ensure -- your goal would be to ensure that there was a safe discharge plan that would take into consideration Kenan's needs and make sure he was getting the caloric intake that you believe he needed in order to put on weight and to stimulate growth and all; right?

A. Correct.

Q. Did you specifically tell DCS that the child

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for cardiovascular; right?
A. Yes.
Q. -- it says, "Continue sildenafil, 20 milligrams" -- what does PO mean?
A. By mouth. Stands for per oral.
Q. Okay. Three times a day.
Sildenafil is the active ingredient in Viagra; right?
A. Correct.
Q. So what was it prescribed here to do?
A. Cause pulmonary vasodilation, so decrease the pressure in the pulmonary vasculature. So --
Q. And in layman's terms, what's it doing?
A. Lowering the blood pressure in the lungs.
Q. Okay. And is that -- is that a regular use of sildenafil or is that an off-label use?
A. Well, my -- so it's regular in that we do it routinely in patients with pulmonary hypertension. It may be an off-label use because -- you'd have to ask Dr. Miga if that's off label or if there is a specific indication, but most -- or a large number of drugs that we use in children are actually off label because they don't specifically do the studies in the children. They do them in adults.
Q. Okay. Let's look at the next page, 1000.

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Maybe it's not the next page, but page 1000. There are some allergies that are identified on the right -- in the right column. Do you see that?
A. Yes.
Q. Are those allergies that were identified and confirmed at the hospital or were those reported by Mother?
A. I'd have to -- so when you look in the system, it will actually say who reports, but most often it's usually just reported by parent, family member.
Q. But looking at this record, you can't tell whether these are what were reported by Mother or what were identified and confirmed by the hospital?
A. Correct.
Q. As far as -- on page 1001, there's a paragraph that had carried over from the previous page. Mr. Crown had asked you some questions about the last part of this carryover paragraph. One thing that's noted in here is that patient's appetite has increased and Mom is wanting to stop the medication that's identified there. That's the thyroid hormone; right?
A. Correct.
Q. Hormone, I mean.
That's one of the effects of that drug is it increases the patient's appetite; right?

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A. It can, yes.
Q. And can it increase the patient's appetite to the point where the -- that the patient might want to overeat?
A. So theoretically, yeah, if you're taking super physiologic -- if you're overdosing on it basically, yeah, it would give you an abnormally high metabolism, so that was Mom's concern, and that's why I called endocrinology, and they did not think that that would be likely at the dose he was on.
Q. Okay. I'm going to just mark a couple of exhibits real quick. Let me just ask you this question, maybe I won't even mark this, but do you -- are you familiar at all with the mold variety of Aspergillus? That's A-S-P-E-R-G-I-L-L-U-S.
A. Uh-huh, Aspergillus, yes.
Q. Okay. What do you know about Aspergillus?
MR. CROWN: Objection to form and foundation.
A. So Aspergillus can cause -- I have seen it in some patients, usually patients with leukemia or on chemotherapy. Most commonly, it can cause pneumonia, so fungal pneumonias. You can also get fungal infections in other organs, like in the liver from it. But primarily, it's an infection of immunocompromised patients.

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Q. BY MR. CONNELLY: Okay. And there was nothing that you did at the hospital to determine whether or not that fungus was present in Kenan; right?
A. I did not specifically send any Aspergillus testing or fungal testing, no.
Q. Do you know a doctor by the name of Scott Jensen?
A. No, not to my recollection.
Q. Okay. So you're not aware that he's the children's primary-care physician; right?
A. No.
MR. CONNELLY: Okay. I'm going to go ahead and mark Exhibit 2.
(Exhibit No. 2 was marked.)
(Discussion off the record.)
Q. BY MR. CONNELLY: Go ahead and take a minute to read that, Doctor. It's a short paragraph.
MS. JUDD: Can you provide the Bates label for Exhibit 2.
MR. CONNELLY: You know what, I'm sorry, it doesn't have a Bates label. Let me see. I did get an email this morning. Let me see if there's a Bates label on that one. Yeah, TURNER_000321.
MS. JUDD: Thank you.

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Q. BY MR. CONNELLY: Let me know when you've read through it, Doctor.
A. I've read it.
Q. So Dr. Jensen says that the issue about the exposure to black mold could explain muscle weakness and lethargy. Do you have any reason to dispute what Dr. Jensen said?
MR. CROWN: Objection to form.
MS. DEAN: Form and foundation. Just for the record, this is dated 6-3-2019.
MR. CONNELLY: Yes.
A. No, I do not.
Q. BY MR. CONNELLY: Okay. And he suggests, as you have, that a physician specializing in mold should be consulted. You agree with that if there was a concern that long exposure to black mold might have been part of the problem here?
MR. CROWN: Objection to form and foundation.
MS. DEAN: Form.
A. So I'm always an advocate for patient -- parents seeking second opinions, third opinions, so I would not oppose that.
Q. BY MR. CONNELLY: Then Dr. Jensen says, "There are mold detoxification enzyme issues that individuals

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can have that explain susceptibility to mold-related illness."
Do you agree or disagree with that?
MR. CROWN: Objection, form, foundation.
MS. DEAN: Form, foundation.
A. I have no reason to disagree with his recommendation.
Q. BY MR. CONNELLY: Then he says, "If the issues they are having resolve outside the home, it would provide reasonable suspicion as well for a plausible explanation for their illness."
When he's saying "they" and "their," he's talking about Kenan and Dylan. Do you take any issue with that last sentence?
MS. DEAN: Form. So he's here as a fact witness to comment on his own care, but this is --
MR. CONNELLY: Yeah.
MS. DEAN: -- things -- this is going on a year later.
MR. CONNELLY: I'm asking him if he agrees or disagrees from a medical perspective with this statement.
MR. CROWN: I join in form and foundation.
MR. CONNELLY: Okay.
A. I don't -- I don't -- again, so this is an area

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of expertise that is not mine, so if somebody has some medical knowledge or experience or recommendation, I don't have any reason to oppose this.
MR. CONNELLY: All right. And I'll just note for the record that June of 2019 is six months later, not a year later, later from Dr. Stewart's involvement.
Q. BY MR. CONNELLY: And then the only other thing I'm going to do here today, Doctor, is just show you Exhibit 3 and what we'll mark as Exhibit 3. I don't have -- this is not anything that's been produced previously.
MS. DEAN: Do you have an extra one, Tom?
MR. CONNELLY: Oh, sorry.
MS. DEAN: Thank you.
MR. CONNELLY: But it is the doctor's LinkedIn. If you want to look on LinkedIn for him, and all I want to do -- go ahead and give him the exhibit.
MR. CROWN: You're saying this has not been produced?
MR. CONNELLY: It has not been produced.
MR. CROWN: So this is the first time we're seeing it?
MR. CONNELLY: First time we're seeing it.
Q. BY MR. CONNELLY: And my question is -- I think

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my only question is, Doctor, is this your LinkedIn account?
A. Yeah, it appears to be me, yes.
Q. And as far as the experience that's identified here, outside of not having your employment at Banner on here, is the rest of the experience noted correct?
A. Everything else on here is correct.
Q. And it says here in your research experience that you spent two years in microbiology lab studying Yersinia pestis from 2009 to 2011 and that you are a teaching assistant for microbiology and pathophysiology. Is that right?
A. Yes.
Q. And what is the Yersinia pestis?
A. It's the bacteria the causes the bubonic plague.
Q. Okay. But you're not a microbiologist; right?
A. No.
Q. Okay.
MS. DEAN: Is that right?
A. Yeah, that's correct.
MR. CONNELLY: I don't have anything else.
MR. CROWN: I have a few follow-up questions.
MR. CONNELLY: Thank you, Doctor.

hypoglycemia, lower extremity weakness, pleural effusion, pulmonary hypertension, retarded development, suspected child abuse. All of those diagnoses are consistent with severe malnutrition; correct?

MR. CONNELLY: Form and foundation.

A. Correct.

Q. BY MR. CROWN: And that's why malnutrition was the probable and leading diagnosis to explain Kenan's severe compromised health condition on admission and through his hospital course; correct?

MR. CONNELLY: Form and foundation.

A. Correct.

Q. BY MR. CROWN: By you and by the medical team at Banner Children's Hospital; correct?

MR. CONNELLY: Form and foundation.

A. Correct.

MR. CROWN: Thank you. No further questions.

MS. JUDD: I have nothing further.

MR. CONNELLY: I don't need to -- I don't think I need to re-ask questions I've already asked. I'll just ask one question, though, Doctor.

(Next page, please.)

FURTHER EXAMINATION

BY MR. CONNELLY:

Q. You were never asked to consider under what conditions the child could be returned home to the mother if there were interventions that were put in place to track his feeding and weight gain; correct?

A. No, I was never asked.

MR. CONNELLY: Okay. Thank you. I don't have any other questions.

MS. DEAN: We will read and sign.

THE VIDEOGRAPHER: We are off the record. The time is 1:59 p.m. This concludes the deposition of Dr. Ryan Stewart.

(1:59 p.m.)

____
RYAN STEWART, M.D.

CERTIFICATE OF CERTIFIED REPORTER

BE IT KNOWN that the foregoing proceedings were taken before me; that the witness before testifying was duly sworn by me to testify to the whole truth; that the foregoing pages are a full, true and accurate record of the proceedings, all done to the best of my skill and ability; that the proceedings were taken down by me in shorthand and thereafter reduced to print under my direction.

I CERTIFY that I am in no way related to any of the parties hereto nor am I in any way interested in the outcome hereof.

[X] Review and signature was requested; any changes made by the witness will be attached to the original transcript.

[] Review and signature was waived/not required.

I CERTIFY that I have complied with the ethical obligations set forth in ACJA 7-206(F)(3) and ACJA 7-206 J(1)(g)(1) and (2). Dated at Phoenix, Arizona, this 11th of March, 2024.

/s/ Jennifer Hanssen
Jennifer Hanssen, RPR
Certified Reporter
Arizona CR No. 50165

* * * *

I CERTIFY that GRIFFIN GROUP INTERNATIONAL has complied with the ethical obligations set forth in ACJA 7-206 (J)(1)(g)(1) through (6).

/s/ Pamela A. Griffin
____
GRIFFIN GROUP INTERNATIONAL
Registered Reporting Firm
Arizona RRF No. R1005

GRIFFIN GROUP INTERNATIONAL -ERRATA SHEET - CHANGES IN TESTIMONY
3200 East Camelback Road Suite 177 Phoenix, Arizona 85018
Kahraman vs The State of Arizona-Video Recorded Deposition of Ryan-Stewart, M.D.-February 26, 2024
Errata & Signature due no later than April 19, 2024.

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